

IN THE SPECIFICATION:

Amend the substitution specification as follows:

Please amend the paragraph [0003] to read as follows.

In order to improve a laser oscillation efficiency, it is essential to provide an electric current blocking structure for the laser diode. In the electric current blocking structure, a ~~career~~ carrier is shut in a limited area in an axial direction. Besides, it is also essential to shut a light efficiently in the area where the ~~career~~ carrier is shut, because the laser oscillation is generated in the laser diode due to a stimulated emission. Shutting a light to a horizontal direction in the laser diode in the InP group is realized on a basis of a difference of a refractive index between InGaAsP core wave guiding a light and an InP buried layer.

Please amend the paragraph [0044] to read as follows.

FIG. 4 is a view for explaining a problem in the process shown in FIG. [[2]] 3;

Please amend the paragraph [0231] to read as follows.

In a process shown in FIG. 25D, the SiO₂ pattern 205 is removed by etching with a mixed liquid including hydrofluoric acid and a hydrogen peroxide water. In a process shown in FIG. 25E, the Fe doped InP layer 207 grows by the MOVPE method. At that

time , a surface of the Fe doped InP layer 207 is flattened because the [[InP clad]] Fe doped InP buried layer 206 and the [[InGaAs layer 204]] InP clad layer 203 make a flat surface made of (100) surface.

Please amend the paragraph [0248] to read as follows.

A description regarding a thirteenth embodiment of a manufacturing process of a multi layer optical wave guide will now be given, with reference of FIGS. 29A to [[29E]] 29G. In FIGS. 29A to 29E, parts that are the same as the parts described above are given the same reference numerals in, and explanation thereof will be omitted.

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In the event any additional fees may be due with respect to this paper, to Deposit
Account No. 01-2340.

Respectfully submitted,

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Enclosures: Marked-up Copy of Drawings (2 sheets)
Replacement Sheets (2 sheets)

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